Shaun R. Bennett

Essay: Trends in libraries that will affect Sci-Tech Librarianship in the next five years:

In the next five years, data management planning and direct research support will become increasingly important, and libraries and librarians will become much more closely integrated into the research lifecycle of academic institutions. Further investments in visualization spaces and makerspaces by libraries will increase this integration into the research lifecycle.

Science and technology librarians now have the opportunity to branch out into seemingly unrelated fields as "Digital Humanities" projects continue to gain in popularity, allowing science and technology skills to be applied to fields like history, art, design, and literature. As technology and data-driven approaches become more popular in non-STEM fields, libraries and librarians will serve as access points to technologies and methods which might be unfamiliar to humanities and social sciences researchers.

Librarians will also engage in the research lifecycle through visualization programs and spaces. Libraries are investing in visualization and immersive experience spaces, and librarians will work closely with researchers to help them take advantage of these spaces as well as learn to use visualization applications. This is especially true in the case of the humanities and social sciences researchers, who are increasingly using visualization tools as methods of spreading their research to a larger audience.

Data management planning and sharing of research results is quickly becoming a major part of research support, especially in the science and technology fields. Major Federal funding organizations such as the National Science Foundation, the Department of Energy, and the National Institutes of Health are requiring increasingly strict standards for data management and

public access to research results. Librarians are already being called upon to help researchers navigate these requirements, and I believe this will continue and expand in the future.

Programs and courses conducted by librarians, such as data management planning and grant writing, offer excellent opportunities to connect with the research community. In addition, librarians will continue to help with copyright issues, citation management, and finding data sets. These core aspects of research support provide opportunities for librarians to interface with the research lifecycle, giving them an opportunity to be seen not just as information brokers, but as research colleagues.

As students and faculty grow more accustomed to reaching out to libraries for help with these aspects of research, librarians will need to not only familiarize themselves with these tools, but also be prepared for a shift in job responsibilities. Automated systems such as demand-driven acquisition will increasingly limit the amount of time librarians need to spend on traditional collection-building roles, allowing them to invest more time in outreach towards faculty and students at their institution. The overall trend of science and technology librarianship is heading less towards individual work inside the library walls, and more towards engaging with and working alongside researchers at both the student and faculty level.